



## EnergyGuard™ **UltraTapered** Polyiso Insulation



### Description:

EnergyGuard™ Ultra Tapered Polyiso Insulation is a sloped panel made of durable coated glass facers (CGF) bonded to a core of polyisocyanurate foam.

### Features and Benefits:

- Prevents ponding water when properly installed on a low-slope roof by providing slope via a series of both tapered and flat polyiso fill panels
- Versatile — approved in single-ply roofing systems, BUR, and modified bitumen with a variety of attachment methods to the deck: mechanically attached, fully adhered, loose laid, ballasted
- Highest R-value per inch of any rigid board insulation
- Easy to install — lightweight, easy to cut, easy to handle
- Increased mold resistance — meets the requirements of ASTM D3273 for resistance to mold\*\*\*
- Increased fire resistance — ANSI/UL 790 Class A Roofing Fire Rating over combustible decks without the use of a gypsum board for fire-rated slip sheet (minimum 3" [76 mm] of EnergyGuard™ Ultra Polyiso in combination with tapered is required, see UL Product iQ for details)

### Panel Characteristics:

**Sizes:** 4' x 4' (1.22 m x 1.22 m) – 4' x 8' (1.22 m x 2.43 m) available upon request

**Thickness:** ½" – 4½" (12.7 mm – 114.3 mm) in a single layer

**Slope:** ⅛" (1.6 mm), ⅙" (3.2 mm), ⅓" (4.8 mm), ¼" (6.35 mm), ⅜" (9.5 mm), ½" (12.7 mm)

### Codes and Compliance:

- Meets the requirements of ASTM C1289 Type II, Class II, Grade 2 (20 PSI) or Grade 3 (25 PSI)
- FM-approved — consult RoofNav.com for specific assemblies
- UL Listed to ANSI/UL 790, UL 263, UL 1258 (see UL product iQ for details)
- ASTM D3273 resistance to mold
- UL evaluation report UL ER1306-03
- Miami Dade County Approved
- State of Florida Approved
- For additional information, contact GAF at 1-800-766-3411 or [designservices@gaf.com](mailto:designservices@gaf.com)

### Tapered Design Team:

Our Tapered Design Team specialists are available within your region to assist you in all aspects of preplanning, design, and training. Reach out at [tdg@GAF.com](mailto:tdg@GAF.com) or 866-207-7123.

#### Our services include:

- Conceptual design assistance
- Quote review and comparison
- Plan and spec review
- Alternate design recommendations
- Job startups, trainings, presentations

### Sustainability:

- Manufactured with EPA-compliant blowing agents containing no CFCs or HCFCs, zero ozone depletion potential (ODP) and negligible global warming potential (GWP)
- Potential LEED Credits for Polyiso Use
- Health Product Declaration (HPD)
- Environmental Product Declaration (EPD) (Industry)



For more information go to [gaf.com/green](http://gaf.com/green)



Visit [gaf.com](http://gaf.com)

We protect what matters most™

**GAF**

## TYPICAL PHYSICAL PROPERTY DATA CHART\*

| Property                       | Test Method | Value                               |
|--------------------------------|-------------|-------------------------------------|
| Compressive Strength           | ASTM D1621  | 20 psi (138kPa) or 25 psi (172 kPa) |
| Dimensional Stability**        | ASTM D2126  | < 2%                                |
| Water Absorption               | ASTM C209   | < 1.5%                              |
| Moisture Vapor Transmission    | ASTM E96    | < 1.5 Perm                          |
| Service Temperature            |             | -100° to 250°F (-73.3° to 121.1°C)  |
| Flame Spread Index*            | ASTM E84    | < 75                                |
| Smoke Developed Index*         | ASTM E84    | < 200 (275 kPa)                     |
| Flexural Strength              | ASTM C203   | 40 psi                              |
| Tensile Strength               | ASTM C209   | ≥500 (24 kPa)                       |
| Property Resistance to Mold*** | ASTM D3273  | Pass (10)                           |

\*Foam core.

\*\*Stated dimensional stability tolerance; board thickness shall not diminish by more than 2% max.

\*\*\*GAF warranties and guarantees do not provide coverage against mold or other biological growth. Refer to gaf.com for more information on warranty and guarantee coverage and restrictions.

## TAPERED POLYISO PHYSICAL CHARACTERISTICS AND SHIPPING INFORMATION

| Physical Characteristics |                                |       |                                        | Shipping Information (4' x 4') (1.21 m x 1.21 m) |                |               |               |                      |
|--------------------------|--------------------------------|-------|----------------------------------------|--------------------------------------------------|----------------|---------------|---------------|----------------------|
| Slope                    | Thickness (Inches/Millimeters) | Size¹ | Average Thickness (Inches/Millimeters) | Board Feet Per Panel                             | Boards/ Bundle | Boards/ Truck | Bundle/ Truck | Sq. Ft. Per Truck    |
| 1/16" (1.6 mm)           | 0.5 – 0.75 (12.7 – 19.05)      | 1     | 0.625 (15.9)                           | 10                                               | 72             | 3,456         | 48            | 55,296 (5,137 sq. m) |
|                          | 0.75 – 1.0 (19.05 – 25.4)      | 2     | 0.875 (22.2)                           | 14                                               | 52             | 2,496         | 48            | 39,936 (3,710 sq. m) |
|                          | 1.0 – 1.25 (25.4 – 31.75)      | 3     | 1.125 (28.6)                           | 18                                               | 40             | 1,920         | 48            | 30,720 (2,854 sq. m) |
|                          | 1.25 – 1.5 (31.75 – 38.1)      | 4     | 1.375 (34.9)                           | 22                                               | 32             | 1,536         | 48            | 24,576 (2,283 sq. m) |
|                          | 1.5 – 1.75 (38.1 – 44.45)      | 5     | 1.625 (41.3)                           | 26                                               | 28             | 1,344         | 48            | 21,504 (1,998 sq. m) |
|                          | 1.75 – 2.0 (44.45 – 51.0)      | 6     | 1.875 (47.6)                           | 30                                               | 24             | 1,152         | 48            | 18,432 (1,712 sq. m) |
|                          | 2.0 – 2.25 (51.0 – 57.15)      | 7     | 2.125 (54.0)                           | 34                                               | 20             | 960           | 48            | 15,360 (1,427 sq. m) |
|                          | 2.25 – 2.5 (57.15 – 64)        | 8     | 2.375 (60.3)                           | 38                                               | 18             | 864           | 48            | 13,824 (1,284 sq. m) |
| 1/8" (3.2 mm)            | 0.5 – 1.0 (12.7 – 25.4)        | AA    | 0.75 (19.05)                           | 12                                               | 64             | 3,072         | 48            | 49,152 (4,566 sq. m) |
|                          | 1.0 – 1.5 (25.4 – 38.1)        | A     | 1.25 (31.8)                            | 20                                               | 38             | 1,824         | 48            | 29,184 (2,711 sq. m) |
|                          | 1.5 – 2.0 (38.01 – 51.0)       | B     | 1.75 (44.4)                            | 28                                               | 26             | 1,248         | 48            | 19,968 (1,855 sq. m) |
|                          | 2.0 – 2.5 (51.0 – 64.0)        | C     | 2.25 (57.2)                            | 36                                               | 20             | 960           | 48            | 15,360 (1,427 sq. m) |
|                          | 2.5 – 3.0 (64.0 – 76.0)        | D     | 2.75 (69.9)                            | 44                                               | 16             | 768           | 48            | 12,288 (1,142 sq. m) |
|                          | 3 – 3.5 (76.0 – 89.0)          | E     | 3.25 (82.55)                           | 52                                               | 14             | 672           | 48            | 10,752 (999 sq. m)   |
|                          | 3.5 – 4.0 (89.0 – 102.0)       | F     | 3.75 (95.3)                            | 60                                               | 12             | 576           | 48            | 9,216 (856 sq. m)    |
|                          | 4.0 – 4.5 (102.0 – 114.3)      | FF    | 4.25 (108.0)                           | 68                                               | 10             | 480           | 48            | 7,680 (713 sq. m)    |
| 3/16" (4.8 mm)           | 0.5 – 1.25 (12.7 – 31.75)      | JJ    | 0.875 (22.2)                           | 14                                               | 50             | 2,400         | 48            | 38,400 (3,567 sq. m) |
|                          | 1.25 – 2 (31.75 – 51.0)        | KK    | 1.625 (41.3)                           | 26                                               | 26             | 1,248         | 48            | 19,968 (1,855 sq. m) |
|                          | 2 – 2.75 (51.0 – 70.0)         | LL    | 2.375 (60.3)                           | 38                                               | 20             | 960           | 48            | 15,360 (1,427 sq. m) |
|                          | 2.75 – 3.5 (70.0 – 88.9)       | MM    | 3.125 (79.3)                           | 50                                               | 15             | 720           | 48            | 11,520 (1,070 sq. m) |
|                          | 1.0 – 1.75 (25.4 – 44.45)      | J     | 1.375 (34.9)                           | 22                                               | 34             | 1,632         | 48            | 26,112 (2,426 sq. m) |
|                          | 1.75 – 2.5 (44.45 – 64.0)      | K     | 2.125 (54.0)                           | 34                                               | 22             | 1,056         | 48            | 16,896 (1,570 sq. m) |
|                          | 2.5 – 3.25 (64.0 – 82.55)      | L     | 2.875 (73.0)                           | 46                                               | 16             | 768           | 48            | 12,288 (1,142 sq. m) |
|                          | 3.25 – 4.0 (82.55 – 101.6)     | M     | 3.625 (92.0)                           | 58                                               | 12             | 576           | 48            | 9,216 (856 sq. m)    |
| 1/4" (6.35 mm)           | 0.5 – 1.5 (12.7 – 38.1)        | X     | 1.0 (25.4)                             | 16                                               | 48             | 2,304         | 48            | 36,864 (3,425 sq. m) |
|                          | 1.5 – 2.5 (38.1 – 64.0)        | Y     | 2.0 (51.0)                             | 32                                               | 18             | 864           | 48            | 13,824 (1,427 sq. m) |
|                          | 2.5 – 3.5 (64.0 – 89.0)        | Z     | 3.0 (76.0)                             | 48                                               | 16             | 768           | 48            | 12,288 (1,142 sq. m) |
|                          | 3.5 – 4.5 (89.0 – 114.3)       | ZZ    | 4.0 (102.0)                            | 64                                               | 12             | 576           | 48            | 9,216 (856 sq. m)    |
|                          | 0.1 – 0.2 (25.4 – 51.0)        | G     | 1.5 (38.1)                             | 24                                               | 32             | 1,536         | 48            | 24,576 (2,283 sq. m) |
|                          | 2.0 – 3.0 (51.0 – 76.0)        | H     | 2.5 (64.0)                             | 40                                               | 19             | 912           | 48            | 14,592 (1,356 sq. m) |
|                          | 3.0 – 4.0 (76.0 – 102.0)       | I     | 3.5 (89.0)                             | 56                                               | 12             | 576           | 48            | 9,216 (856 sq. m)    |
|                          |                                |       |                                        |                                                  |                |               |               |                      |
| 3/8" (9.5 mm)            | 0.5 – 2.0 (12.7 – 51.0)        | SS    | 1.25 (31.8)                            | 20                                               | 38             | 1,824         | 48            | 29,184 (2,711 sq. m) |
|                          | 2.0 – 3.5 (51.0 – 88.9)        | TT    | 2.75 (69.9)                            | 28                                               | 27             | 1,296         | 48            | 20,736 (1,926 sq. m) |
|                          | 1.0 – 2.5 (25.4 – 64.0)        | S     | 1.75 (44.4)                            | 44                                               | 16             | 768           | 48            | 12,288 (1,142 sq. m) |
| 1/2" (12.7 mm)           | 0.5 – 2.5 (12.7 – 64.0)        | Q     | 1.5 (38.1)                             | 24                                               | 32             | 1,536         | 48            | 24,576 (2,283 sq. m) |
|                          | 2.5 – 4.5 (64.0 – 114.3)       | QQ    | 2.5 (64.0)                             | 56                                               | 12             | 576           | 48            | 9,216 (856 sq. m)    |
|                          | 1.0 – 3.0 (25.4 – 76.0)        | XX    | 2.0 (51.0)                             | 32                                               | 22             | 1,056         | 48            | 16,896 (1,570 sq. m) |

¹Availability for these tapered panel systems may vary for each region.



Visit **gaf.com**

We protect what matters most™

